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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,540	02/10/2004	David R. Maas	13506-015001	6695

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MINNEAPOLIS, MN 55440-1022

EXAMINER
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BATSON, VICTOR D

ART UNIT	PAPER NUMBER
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3671

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/775,540

Applicant(s)

MAAS ET AL.

Examiner

Victor Batson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 11-17 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-31 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 11-13, 15-17, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,6,11,12,13,15,16,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards (6,484,811).

Edwards discloses an apparatus comprising first and second holding means 24 coupled to a carrier, with staggered first and second soil fracturing means 26 capable of fully rotating about their holding means without interference as shown in figure 3. It is noted that the aerating unit 20 during use is rotatably mounted in a carrier (see modified figure below). It is further noted that aerating unit 20 includes first and second shafts 24 (see modified figure 3 below). Therefore, Edwards is considered to meet the limitation of “first and second shafts rotatably coupled to a carrier”. Additionally, Edwards in column 1 lines 42-45, specifically states that centrifugal force causes each of the hammers 26 to pivot radially beyond the limits of each spacer 27, and is therefore considered to meet the limitation of each tine fully rotating about the shaft.

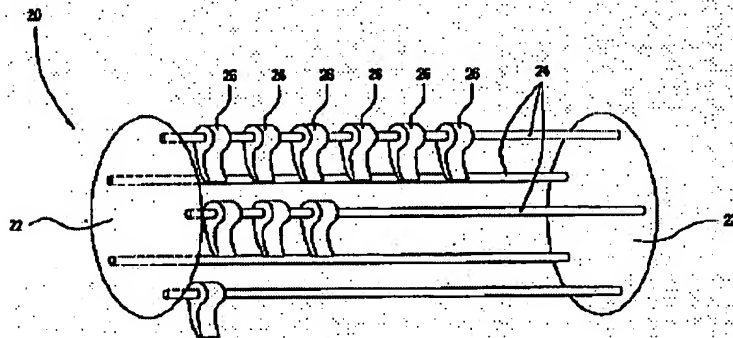
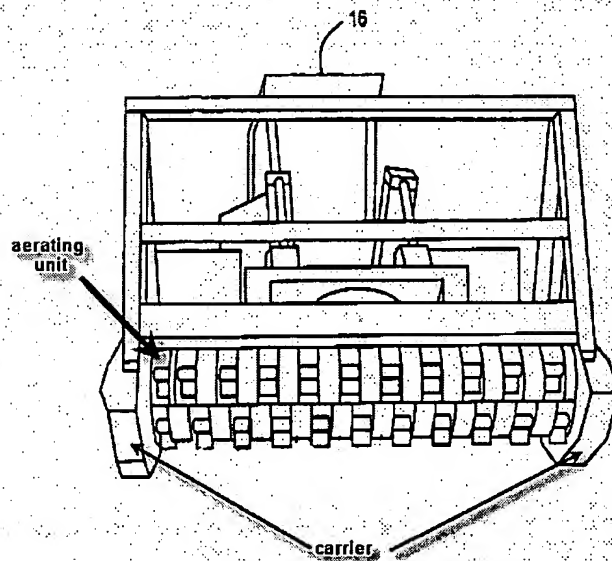


Fig. 3



### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 32,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards (6,484,811).

Edwards discloses an apparatus as described previously, but lacks specifying the details of the aerating unit drive means. The examiner takes Official Notice that it is known in the art for to use a planetary gear system as a drive means (for example in vehicle drive systems).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Edwards by using a drive means that includes a planetary gear system to drive the aerating unit since the examiner takes Official Notice of the equivalence of the drive means of Edwards and a drive means that includes a planetary gear system, and the selection of any of these known equivalents to drive the aerating unit would be within the level of ordinary skill in the art.

#### ***Allowable Subject Matter***

Claims 3-5,7,14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 25-31 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed 10/13/06 have been fully considered but they are not persuasive. Applicant argues regarding claim 1 that Edwards fails to disclose or suggest first and second shafts rotatably coupled to a carrier because the support rods 24 of Edwards are affixed to end plates 22. The examiner notes however that end

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plates 22 are not considered the carrier (see modified figure above with carrier identified). Applicant argues regarding claim 11 that Edwards fails to disclose that during operation of the apparatus, the first soil fracturing means fully revolves about the first holding means relative to the carrier, because Edwards discloses that the cutting hammers 26 are enclosed by sector shaped spacers 27 that limit the hammers 26. The examiner notes however that Edwards further discloses that centrifugal force causes each of the cutting hammers 26 to pivot radially beyond the limits of each spacer 27 (see column 1 lines 42-45). Additionally, Edwards discloses that cutting hammers 26 are freely rotatable about the support rods 24, and are sometimes referred to as "flail" mulchers or mowers (see column 1 lines 57-59).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Batson whose telephone number is (571) 272-6987. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (571) 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 19, 2006



Victor Batson  
Primary Examiner  
Art Unit 3671